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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,415	10/06/2004	Richard Neill Cameron	10022/567	8526

7590 06/30/2005

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EXAMINER

DOAN, KIET M

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/510,415

Applicant(s)

CAMERON, RICHARD NEILL

Examiner

Kiet Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/06/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dieptraten et al. (Patent No. 5,991,287) in view of Engwer et al. (5,987,062).

Consider **claim 1**, Diepstraten teaches a localization method of a mobile station (2) communicating with at least one central server (1) through a wireless network comprising a plurality of wireless radiofrequency transmitting access points (3), among which a first access point is chosen to perform the communication (C3, L57-67, L1-3, Fig.1, Illustrate central server as No.20, access points as No.40-42) comprising the steps of: measuring the signal strengths received by said station from the plurality of access points (C3, L58-67, Fig.2, teach measuring signal which read on monitor the quality). Diepstraten teaches the limitation of claim as discuss **but fail to teach** storing each measured strength with an address identifying the corresponding connected access point; comparing said stored strengths to values of a predetermined table of signal strength thresholds affected to access points, defining one or more event zones (EZ) each comprising one or more attenuation ranges of one or more access points; and considering the station as located in a given event zone if the measured strength

corresponding to an access point defining that event zone is comprised in the attenuation range of that access point.

In an analogous art, Engwer teaches "Seamless roaming for wireless local area network". Further, Engwer teaches storing each measured strength with an address identifying the corresponding connected access point; comparing said stored strengths to values of a predetermined table of signal strength thresholds affected to access points (C2, L31-67, C3, L1-7), defining one or more event zones (EZ) each comprising one or more attenuation ranges of one or more access points; and considering the station as located in a given event zone if the measured strength corresponding to an access point defining that event zone is comprised in the attenuation range of that access point (C4, L55-67, C5, L1-11, Fig.1, Illustrate one or more event zones and attenuation range which read on load balancing).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Diepstraten and Engwer, such that at least one central server through a wireless network comprising a plurality of wireless radiofrequency transmitting access points, measuring/storing/comparing the signal strengths of access points, to provide means for the users moving freely in the area where central server is base.

Consider **claim 2**, Diepstraten teaches the localization method of claim 1, in which said attenuation ranges are a function of the environment and of the shape of the event zones (EZ) (C4, L1-11).

Consider **claim 3**, Diepstraten teaches a communication method between at least one mobile station (2) and at least one central server (1) through radiofrequency transmitting access points (3) to which said station is wireless connectable (C3, L57-67, L1-3, Fig.1, Illustrate central server as No.20, access points as No.40-42).

Engwer teaches comprising the steps of: establishing a communication between said station and said central server through a first of said access points from which said station receives the highest signal strength (C4, L46-65, C5, L24-35, Fig.3, Illustrate Best AP means as highest signal strength,); comparing the signal strength received by said station from at least one second access point with respect to at least one signal strength threshold used for defining at least one event zone (EZ) in which at least one specific application of the server is to be available if said station is present in said event zone; and making available for said mobile station said specific application if the station is considered in the event zone (C2, L31-67, C3, L1-7, C4, L10-54).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Diepstraten and Engwer, such that at least one central server through a wireless network comprising a plurality of wireless radiofrequency transmitting access points, establishing a communication between said station and said central server, comparing the signal strength, to provide means for connectivity when moving in the area where central server is base.

Consider **claims 4 and 5**, Engwer teaches the method of claim 3, in which said

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station is considered to be in the event zone if the received signal strength is lower/higher than said threshold (C2, L53-67, C5, I3-1-7, C5, L36-44).

Consider **claim 6**, Engwer teaches the method of claim 3, in which the station is considered as being in the event zone by applying the localization method of claim 1 or 2 (C2, L8-19, C4, L55-65).

Consider **claim 7**, Diepstraten teaches the method of claim 3, in which the communication are made according to one of the following unregulated spectrum standard suites: 802.11, 802.11a, 802.11b, 802.11e, 802.11f, 802.11g, 802.11h, 802.15.1, 802.15TG2, 802.15TG3, 802.15TG4, Bluetooth, Wi-Fi, HiperLAN1, HiperLAN2 (C2, L42-47):

Consider **claim 8**, Diepstraten teaches a communication system between at least one mobile station (2) and at least one central server (1) through radiofrequency transmitting access points (3) to which the station is wireless connectable (C3, L57-67, L1-3, Fig.1, Illustrate central server as No.20, access points as No.40-42).

comprising: means to define, with at least a signal strength threshold of at least one access point, at least one event zone (EZ) in which at least one specific application of the server is to be available to the station if present in that zone; means to localize the mobile station with respect to the event zone boundary, based on the signal strength received by the station from the access points (C2, L8-20, L31-67, C3, L1-7, C4, L10-55).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Diepstraten and Engwer, such that at least one central server through a wireless network comprising a plurality of wireless radiofrequency transmitting access points, at least a signal strength threshold/event zone and server to localize the mobile station, to provide means for better service for users in localize zone.

Consider **claim 9**, Engwer teaches the system of claim 8, in which the localization of the mobile station is performed by said central server (1) on the basis of a table defining each event zone (EZ) by attenuation range(s) around one or more access points (3) (C3, L56-65, C4, L55-65, Fig.2, Illustrate mobile station read on MU, by attenuation range read on static load balancing and AP).

Consider **claim 10**, Engwer teaches the system of claim 8, further comprising means to implement the communication method of any of claim 3 to 7 (C1, L57-67, C2, L8-20, L31-67).

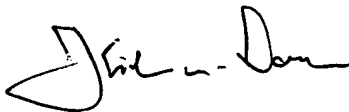
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kiet Doan
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